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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/756,453 | 01/08/2001 | Richard Bolling | ADO 0069 PA | 5555 |

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EXAMINER

RIBAR, TRAVIS B

| ART UNIT | PAPER NUMBER |
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1711

DATE MAILED: 10/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/756,453

Applicant(s)

BOLLING ET AL.

Examiner

Travis B Ribar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-4 and 6-13, drawn to a method for controlling the flow of a heat activated expandable sealant, classified in class 425, subclass 4R.
 - II. Claim 14, drawn to a method for controlling the flow of a non-expandable sealant, classified in class 425, subclass 87.
 - III. Claims 15-19, drawn to a multilayer structure including a heat-activated expandable sealant and a flow control agent, classified in class 428, subclass 304.4.
 - IV. Claims 5 and 20, drawn to a method for sealing a cavity, classified in class 425, subclass 211.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I, III, and IV are related as product (III) and process of use (I and IV).

The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process, such as using it as a coating for a porous structure, such as an open grid.

3. Inventions I, II, and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, inventions I and IV are not disclosed as capable of use together with invention II. Specifically, invention II does not include a heat-activated expandable sealant, whereas inventions I and IV do. The applicant does not disclose that these multiple methods may be used together.

4. Inventions I and IV represent separate and patentably distinct inventions. Specifically, the method of controlling the flow in invention I is patentably distinct from the method of sealing a cavity in invention IV, as each invention would conceivably be able to be the subject its own patent.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Ms. Susan Luna on September 17, 2002 a provisional election was made with traverse to prosecute the invention of group III, claims 15-19. Affirmation of this election must be made by applicant in replying to this

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Office action. Claims 1-14 and 20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. The term "...modified polyethylene ..." in claim 16 is a term that renders the claim indefinite. The term "...modified polyethylene..." is not defined by the claim, is not an art-recognized phrase, and the specification does not provide a standard for ascertaining its meaning. One of ordinary skill in the art would not be reasonably appraised of the limitations of this claim.

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11. Regarding claim 17, it is unclear from the language of the claim the meaning of the phrase, "a polyvinyl acetate." Possible interpretations of this could be a vinyl acetate copolymer or a blend of polyvinyl acetate with another polymer. For the purposes of this examination, this claim will be interpreted as broadly as possible, and the phrase, "a polyvinyl acetate" will be interpreted to mean, "vinyl acetate" which encompasses both of the interpretations of the phrase presented above.

12. Claim 17 recites the limitation "...flow control agent coating..." in line 1. There is insufficient antecedent basis for this limitation in the claim.

13. The term "... the form of ... [a] thermoformed part ..." in claim 18 is a term that renders the claim indefinite. The term "...the form of ... [a] thermoformed part..." is not defined by the claim, is not an art-recognized phrase, and the specification does not provide a standard for ascertaining its meaning. One of ordinary skill in the art would not be reasonably appraised of the limitations of this claim.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in–

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

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(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

15. Claims 15, 18, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Johnson et al.

Johnson et al., which the applicant included in their Information Disclosure Statement, discloses a melt-flowable material and a method for sealing surfaces. The melt-flowable material is present as part of a sealing tape (column 3, lines 22-23) used to seal gaps in automobiles (column 4, lines 23-29), which is the same use that the applicant envisions for the present invention. The sealant includes thermal expansion agents (column 15, lines 55-58), meeting the expandable sealant requirement of the claims. The multilayer structure in Johnson et al. includes a woven or non-woven scrim between multiple layers of melt-flowable sealing material (column 15, lines 55-58) and states that the scrim serves to prevent excessive flow of the sealant during processing and also adds structural strength to the multilayer structure. It is in that manner that the scrim meets the applicant's definition of a flow control agent. Since this result would only occur if the scrim had a melt flow rate lower than that of the sealant (e.g. if the scrim didn't melt at all), the reference anticipates the relative melt flow rates in claim 1.

The added structural strength that the scrim adds to the material would also cause the multilayer structure to exhibit less sagging than if the scrim were not there, meeting the requirements of claim 19. Finally, the sealant is in the form of an extruded sheet (column 6, lines 1-3), meeting this aspect of claim 18.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. in view of Bien et al.

Johnson et al. discloses the invention in claim 15, but does not include the added sealant limitations present in claim 16. Bien et al. teaches this aspect of the invention.

Bien et al. shows RuVan sealer (column 2, line 8) materials are well known in the art to provide good sealing properties when used to seal gaps in automotive bodies. The applicant states in the specification (page 4) that the composition that is listed in claim 16 is a RuVan sealer composition.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a RuVan sealer, such as the one the applicant uses, in the invention in Johnson et al. The motivation for doing so would be to create a product useful in sealing gaps in automobiles, since the sealing material RuVan sealers are known to do so. Therefore it would have been obvious to combine Bien et al. with Johnson et al. to obtain the invention as specified in claim 16.

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18. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. in view of Daponte.

Johnson et al. discloses the invention in claim 15, but does not include the added sealant limitations present in claim 17. Daponte teaches this aspect of the invention.

Daponte discloses that nonwoven webs or scrims can be made from ethylene-vinyl acetate copolymers (column 2, lines 54-56) with the advantage that such webs or scrims are elastic and are slightly tacky at slightly elevated temperatures, leading to beneficial adhesive properties (column 3, lines 35-43).

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a web or scrim such as that in Daponte as the scrim in the invention Johnson et al. discloses. The motivation for doing so would be that such a web is elastic, and therefore easy to form into a final shape, at room temperature and tacky at slightly elevated temperatures, allowing for the easy formation of adhered multilayers. Therefore it would have been obvious to combine Daponte with Johnson et al. to obtain the invention as specified in claim 17.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis B Ribar whose telephone number is (703) 305-3140. The examiner can normally be reached on 8:30-5:00 Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703)


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872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Travis B Ribar
Examiner
Art Unit 1711

TBR
September 29, 2002



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700